## **Amendments to the Claims:**

This listing of claims will replace all prior versions and listings of claims in the application:

## **Listing of Claims:**

- 1. (currently amended): A method for determining the thickness of a layer of lacquer which is applied by electrophoretic immersion coating to an article, wherein the article for immersion coating is immersed in a lacquer immersion bath containing lacquer and forms an electrode which generates, together with at least one counter electrode, an electrical field comprising the following steps:
  - a) determining the electrical charge flowing through the article during immersion coating,
  - b) measuring the maximum starting current which flows through the article at the start of immersion coating.
  - determining the surface of the article exposed to the lacquer, thereby [[and]] using
    the maximum this measured starting current measured in step b) as an input value
    to determine the surface of the article exposed to the lacquer,
  - [[c]]d) determining the thickness of the layer of lacquer based on the electrical charge determined in step a) and the surface determined in step [[b]]c).
- 2. (previously presented): The method of claim 1, wherein the electric current flowing through the article during immersion coating is measured for determining the electric charge in step a).
- 3. (cancelled):
- 4. (currently amended): The method of claim 1 wherein the thickness of the layer of lacquer is determined in step [[c]]d) by taking into account the temperature of the lacquer.
- 5. (currently amended): The method of claim 1, wherein the thickness of the layer of lacquer is determined in step [[c]]d) by taking into account the pH <u>factor</u> of the lacquer.

- 6. (currently amended): The method of claim 1, wherein the thickness of the layer of lacquer is determined in step [[c]]d) by taking into account the electrical conductivity of the lacquer.
- 7. (currently amended): The method of claim 1, wherein the thickness of the layer of lacquer is determined in step [[c]]d) by taking into account the solids content of the lacquer.
- 8. (currently amended): The method of claim 1, wherein the thickness of the layer of lacquer is determined in step [[c]]d) by taking into account the density of the lacquer.
- 9. (currently amended): The method of claim 1, wherein the thickness of the layer of lacquer is determined in step [[c]]d) by taking into account the spacing between the article and the at least one counter electrode.
- 10. (cancelled)
- 11. (currently amended): The method of claim 1[[0]], wherein the predetermined value depends on parameters of the lacquer.
- 12. (previously presented): The method of claim 1, wherein the immersion coating is finished as soon as the determined layer thickness has reached a predeterminable target value.
- 13. (currently amended): A system for determining the thickness of a layer of lacquer which is applied by electrophoretic immersion coating to an article, comprising:
  - an immersion bath which is configured to receive for receiving a lacquer in which the article can be immersed,
  - a voltage source, <u>having a first of which one</u> pole, <u>which is configured to be connected to the article</u>, and a second pole, can be connected to the article and of which the other pole <u>which</u> is connected to at least one counter electrode reaching into the immersion bath,
  - an ammeter which is configured to measure a current flowing through the article during

## immersion coating,

- a charge measurement apparatus which is configured to determine from the current measured by the ammeter for determining the electrical charge flowing through the article during immersion coating, and,
- a computer which is configured
  - -- to store a maximum starting current which flows through the article at the start of immersion coating and which has been measured by the ammeter, and
  - -- to determine the surface of the article exposed to the lacquer, thereby using the stored maximum starting current as an input value, and
  - to determine the thickness of the layer of lacquer which is applied by electrophoretic immersion coating to the article, thereby using the charge measured by the charge measurement apparatus and the surface of the article as input values. determines the thickness of the layer of lacquer from the charge measured by the charge measurement apparatus and the surface of the article exposed to the lacquer, wherein the maximum starting current which flows through the article at the start of immersion coating can be stored in the computer and utilized to determine the surface of the article exposed to the lacquer.

## 14 – 16. (cancelled)

- 17. (previously presented): The system of claim 13, comprising a temperature sensor, which is connected to the computer, for determining the temperature of the lacquer.
- 18. (previously presented): The system of claim 13, comprising a pH sensor, which is connected to the computer, for measuring the pH factor of the lacquer.
- 19. (previously presented) The system of claim 13, comprising a conductivity sensor, which is connected to the computer, for measuring the conductivity of the lacquer.
- 20. (previously presented): The system of claim 13, comprising a sensor, connected to the computer, for determining the solids content of the lacquer.

- 21. (previously presented): The system of claim 13, comprising a density sensor, which is connected to the computer, for measuring the density of the lacquer.
- 22. (cancelled)
- 23. (previously presented): The system of claim 13, comprising a controller which is configured to terminate the immersion coating as soon as the specific lacquer thickness has reached a predeterminable target value.